

REMARKS

Reconsideration and further examination of the subject patent application in light of the present Amendment and Remarks is respectfully requested. Claims 1-36 are pending in the application and stand rejected. Applicant respectfully traverses these rejections. The claims have been amended to improve the clarity thereof by pointing out features regarding (a) the use of barcodes and other ID codes, (b) the types of data which are recorded and displayed, and (c) the manner by which this data and the record of service completion may be updated. No new matter has been added.

Rejection Under §102

A. Rejection of Independent Claims 1, 7 and 19

The Examiner rejected the claims under 35 U.S.C. §102(b) as being anticipated by Shotey (US Pub. 2002/0004740). Applicant respectfully traverses these rejections. The Examiner stated that Shotey discloses an apparatus for diarizing janitorial services during a cleaning patrol, and refers to Figure 5 indicating that Shotey includes computing hardware interconnecting a display 306 and a plurality of keys 302 together with a docking port 316 and a barcode reader 510. The Examiner cites paragraph 58 as disclosing that the Shotey barcode reader 510 is operable to receive a scan of a barcode. With respect to Figure 6, the Examiner indicates that the Shotey computer hardware is operable to record completion of a cleaning task corresponding to a received barcode.

Applicant respectfully disagrees with the Examiner's position for several reasons: First, Shotey does not disclose an apparatus for diarizing *janitorial* services during a *cleaning* patrol. Rather, Shotey discloses an apparatus for collecting marketing data from multiple merchandise display locations. In contrast, amended claims 1 and 7 specifically recite a printed barcode or ID code that is mounted or locally readable to a *janitorial cleaning zone* of a facility, which is visited by janitors traversing a cleaning patrol route. The structural element of printed barcode or ID code that is mounted or locally readable is not taught or disclosed in Shotey.

Second, Figure 5 of the Shotey does not disclose computing hardware which interconnects either (a) a display, or (b) a keypad, with (c) a docking port and a barcode reader. Applicant submits that Figure 5 of the Shotey merely discloses a few docking ports interconnected with a barcode reader by way of a processor. In contrast, amended claims 1 and 19 recite computing hardware interconnecting a docking (or data transfer) port and a barcode (or ID code) reader, both with a display and with a plurality of keys. This element is completely missing in Shotey.

Third, Shotey does not disclose that its barcode reader is operable to receive a barcode scan representative of a cleaning task. Rather, any barcode scans which might be received by the Shotey device represent either merchandise display location codes or merchandise display codes. This is very different than applicant's claimed invention. For example, amended claims 1 and 7 recite a barcode reader that contemporaneous with a janitorial cleaning, scans a printed barcode (or receives an ID code) of the apparatus, with the code being provided local to a janitorial cleaning zone of a facility. Such a barcode reader is not taught or disclosed in Shotey.

Fourth, the computer hardware described in Shotey is not operable to record completion of a cleaning task corresponding to a received barcode. Rather, completed tasks which might be recorded by the Shotey device represent either an arrival time at, or a departure time from, a merchandise display location or a merchandise display. This is very different from applicant's claimed invention as recited in amended claims 1 and 7, which recite computing hardware which records when a janitorial cleaning has been completed in each zone of a facility.

Accordingly, applicant submits that the computing hardware disclosed by Shotey does not record whether a facility has been cleaned. Rather, Shotey merely records when marketing personnel attend to a merchandise display. Independent claims 1, 7 and 19 have been amended to recite the structural element of either a printed barcode, or an ID code. Shotey does not teach or disclose such structural elements, and merely discloses scans of merchandise display barcodes. Further, the scans disclosed in Shotey do not relate to janitorial cleaning in any way whatsoever.

Applicant respectfully submits that at least several claimed elements are missing from the primary reference to Shotey. Because at least one significant element is missing, Shotey cannot anticipate applicant's claimed invention with respect to independent claims 1, 7, and 19. Further, applicant submits that the dependent claims are allowable as depending from allowable base claims, respectively.

B. Rejection of Dependent Claims 2-4, 10-11, 14-15 and 24

As mentioned above, Shotey is missing many structural element of applicant's claimed invention. For example, with respect to claims 2-4, Shotey does not teach or disclose any of the following claimed features:

- i. a printed barcode representative of a prescribed janitorial cleaning task;
- ii. a barcode reader that performs a scan when a prescribed janitorial cleaning task is completed;
- iii. computing hardware that records performance of prescribed janitorial cleaning tasks;
- iv. computing hardware that presents, on a display, either a zone to be cleaned, or a janitorial cleaning task to be performed; or

- v. a second printed barcode mounted substantially local to another cleaning zone along a cleaning patrol route.

With respect to dependent claim 10, although Shotey may mention a voice recognition system, it does not disclose (whether in paragraph No. 121 or elsewhere) a system that is capable of recording a *comment* made by janitorial cleaning personnel in relation to cleaning of a janitorial zone. In fact, there is no disclosure whatsoever regarding any form of voice *recording*. With respect to dependent claims 11 and 14, although the Shotey device may include a retractable antenna 314 (Figure 3), Shotey does not disclose transmission of *janitorial cleaning data* by this antenna.

With respect to dependent claims 15 and 24, Shotey does not disclose (whether in paragraph No. 94 or elsewhere) uploading of data *each time* a barcode scan occurs. Rather, Shotey specifically discloses that uploading is preferably “initiated by selection of a ‘transmit’ function key,” which is essentially the opposite of applicant’s claimed features, which provide for substantially constant updating of the host server with janitorial cleaning data (i.e., without requiring user-actuation of a selectable upload feature on the apparatus).

Because at least one significant element is missing from each of the dependent claims, Shotey cannot anticipate applicant’s claimed invention with respect to dependent claims. Further, the dependent claims are allowable as depending from allowable base claims, respectively.

Rejection Under §103

The Examiner rejected the claims as being unpatentable under 35 U.S.C. §103 over Shotey in view of Scribner (US 4,688,026). Applicant respectfully traverses these rejections.

A. Rejection of Claim 21

The Examiner correctly points out that Shotey fails to disclose an ID code provided in the form of an RF tag. The Examiner then applied Scribner as providing the missing element. Applicant respectfully disagrees that combining the references provides applicant’s claimed invention or that such a combination would be obvious. First, the primary reference to Shotey is missing several claimed elements as set forth above regarding the rejection under §102. Second, even if Shotey were combined with the secondary reference to Scribner, Scribner does not provide the elements that are deficient in Shotey. Third, the references teach away from making such a combination.

Shotey relates to the use of barcodes in the merchandise and marketing contexts. Scribner relates to RF tags used in association with warehouse inventory control, art objects, facility security and other substantially fixed or “big ticket” items. Scribner is completely removed from use in connection with merchandise or marketing applications. It would not have been obvious, nor would it make sense, for one of ordinary skill to combine these references. Applicant submits that both

references teach away from any such combination.

In that regard, the Shotey collection system is used in merchandise and marketing operations, where it is important for barcodes or other *low cost* identification tags, to be used widely. In such marketing and merchandising fields, identification tags are affixed either (a) to a high volume of consumer goods, or (b) to a somewhat lower number of consumer displays, where such consumer displays are inherently temporary and/or disposable in nature. Shotey discloses that one objective is to provide for the efficient collection of marketing and merchandising data. Merchandise and marketing data can not be efficiently collected if relatively *expensive* identification tags are substituted in place of lower cost alternatives. Even the lowest cost RF tags, such as passive RF tags (which are not disclosed in Scribner), cost between about 10 to about 60 times to cost of an identical commercial implementation using barcodes.

Because of such cost differential, it should be appreciated that the Shotey system used in association with consumer goods and (inherently disposable) marketing and merchandise displays, *teaches away* from systems using the Scribner RF tags. Thus, it would not be logical to combine Shotey with the comparatively expensive RF tags of Scribner. Further, Scribner disparages using barcodes in association with warehouse inventory control, art objects, facility security and other substantially fixed items, and lists many disadvantages of such technology (Col. 1, line 29 - Col. 2, line 7). This is a further indication that Scribner indeed teaches away from using barcodes and away from the combination suggested by the Examiner.

Additionally, the marketing data collection system disclosed by Shotey reference and the tagged object data methods disclosed by Scribner are structurally different, operate in different ways, and perform completely different functions than applicant's claimed apparatus for diarizing services during a patrol. In summary, it would not be obvious to combine Shotey's marketing data collection system, which requires disposable tags or a high volume of tags, with Scribner's fixed object-based tagging, which involves substantially permanent fixing of objects with identification tags, to arrive at applicant's claimed invention.

B. Rejection of Independent Claims 5 and 27

As a preliminary matter, applicant notes an ambiguity in the Office Action. The Examiner states on page 4, lines 1-2 of paragraph 14, that "Scribner *discloses* ... a method of diarizing the performance of janitorial services," but then further states on page 5, lines 7-8 that "Scribner does *not* disclose janitorial services..." Applicant reasserts that above arguments made above with respect to the rejection based on §§102-103 that the combination of the cited references does not provide applicant's claimed invention, for several reasons.

First, Scribner does not disclose the provision of a task set comprised of servicing tasks that are *prescribed* prior to attending in a particular zone. Rather, Scriber specifically discloses that the user is only advised of the tasks to be completed when they come within the required proximity of the RF tags (Col. 3, Lines 18-23 and 27-32). In contrast, amended claims 5 and 27 are directed to cleaning or servicing tasks that are *prescribed* prior to attending a particular zone of a facility.

Second, Scribner does not teach or suggest determining whether a *next* zone remains to be serviced or a *next prescribed* servicing task remains to be completed – i.e., *prior to* any attendance at such zone. Rather, Scriber specifically discloses that information relating to the service requirements in a particular zone, and the servicing tasks remaining to be completed therein, are not disclosed to the user until they actually enter that zone (Col. 3, Lines 18-23 and 27-32). In contrast, amended claims 5 and 27 are directed to the *a priori* determination of zones requiring cleaning or servicing, and servicing tasks remaining to be completed, prior to any attendance in proximity to a particular zone of a facility.

Third, Scribner does not disclose waiting for a scan of an ID code that corresponds either to a *next* zone to be serviced or cleaned, or to a *next* servicing task remaining to be completed in such zone, for example, in the future. Rather, Scribner specifically discloses that the RF tag is scanned only when, *presently* (i.e., not in the future), either (i) the zone is being serviced or (ii) the servicing task list is actually being updated (Col. 3, Lines 18-23 and 27-32).

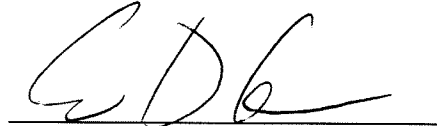
Scribner specifically discloses RF tags that hold the status information associated with a particular fixed object, rather than such information being contained in a centralized computer database (Col. 3, Lines 35-53). In Scribner, when the portable unit comes within a certain proximity, it receives status information from all local RF tags (i.e., the portable unit not having been previously apprised of same). Scribner further discloses that, at the same time, the status of all local RF tags are then updated and stored in the RF tags themselves, rather than in a centralized computer database, and notwithstanding any prompts to actually perform certain object-related services, which may then be ephemerally indicated on a display of the portable unit. As such, the next time the objects' RF tags are read, they provide the portable unit with their updated status.

Applicant submits that Scribner does not disclose the elements recited in claims 5 or 27 and that such elements would not be obvious, because in Scribner, the actions described are performed once, and only once, upon entry into proximity of all of RF tags within a particular zone (see Col. 3, Lines 18-23, Lines 27-32, Lines 35-53). Scribner's fixed object-based tag-data-storing method cannot be logically modified to arrive at applicant's claimed invention because Scribner teaches a method wherein individual fixed objects are the repositories of relevant status information, which is completely opposite of applicant's claimed invention. Finally, applicant reasserts the above arguments to overcome the rejection of claims 6, 18 and 28-38.

Summary

Pending claims 1-36 as amended are patentable. Applicant respectfully requests the Examiner grant early allowance of this application. The Examiner is invited to contact the undersigned attorneys for the applicant via telephone if such communication would expedite this application.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'E D C', is written over a horizontal line.

Registration No. 38,110
Eric D. Cohen
Attorney for Applicant

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200